

6.10 NEW LARGE LANDSCAPE USERS

6.10.1 Introduction

New large landscape users are those industrial users with a substantial water-intensive landscaped area that was planted after January 1, 1990. The conservation program differentiates between two types of large landscape users: non-residential facilities that are hotels or motels and non-residential facilities that are not hotels or motels. If the facility is not a hotel or motel, conservation requirements apply to areas in excess of 10,000 square feet. If the facility is a hotel or motel, requirements apply to areas in excess of 20,000 square feet. If the facility has more than 10 acres of water-intensive landscaped area, it is defined as a turf-related facility and is subject to the conservation requirements discussed in section 6.3 of this chapter.

If a facility has in excess of 10 acres of water-intensive landscaped area, it is defined as a turf-related facility and is subject to specific conservation requirements discussed elsewhere in this chapter.

6.10.2 Water Use by New Large Landscape Users

In the Pinal AMA, no new large landscape users with water rights were identified by the Department during the second management period.

Water use associated with landscaping is directly related to the size of the landscaped area, the types of vegetation, and the efficiency of the irrigation method used. Many municipal water providers have ordinances that place some conditions on new non-residential landscaping. While these ordinances have multiple objectives, they also have provisions that address water conservation. Some of these provisions include the placement of plants based on their water needs, planting of low water use plants in certain areas, and preservation of native vegetation.

6.10.3 Program Development and Issues

The distinction in the program between hotel or motel landscapes and landscapes that are associated with other types of facilities is intended to recognize that economic competition within the industry may pressure certain hotel and motel developments to plant high water-using landscape plant material.

The Department believes that consultant studies done for the Second Management Plan still apply. These studies indicated that significant reductions in landscape water use can be achieved using the following techniques:

- Improving water application efficiency through proper irrigation scheduling, use of more sophisticated control systems, conversion to drip irrigation, and irrigation systems designed to accommodate plants with similar water needs;
- Reducing the size and perimeter of turfed areas and limiting their placement to functional use areas and areas of high visual impact;
- Using drought-resistant plant species adapted to the desert;
- Using proper planting, fertilization, and maintenance techniques;
- Grading sites to direct rainfall into planted areas;
- Avoiding the use of water-intensive plants within rights-of-way thus emphasizing the community's commitment to low water use designs.

6.10.4 New Large Landscape User Program

The new large landscape user program for the Third Management Plan is similar to that in the Second Management Plan. In addition to the requirements that apply to all industrial users, new large landscape

users must limit the percentage of water-intensive landscaped area above a specified square footage. The facility must limit its water-intensive landscaped area to the greater of the following: (1) 10,000 square feet (20,000 square feet for hotels and motels) plus 20 percent of the area in excess of 10,000 square feet (20,000 square feet for hotels and motels); and (2) the total surface area of all bodies of water within the facility that qualify as water-intensive landscaped area.

Water-intensive landscaping includes not only high water using plants such as turf, but bodies of water such as ponds. However, it does not include any area of land watered exclusively with direct use effluent or effluent recovered within the area of impact, bodies of water used primarily for swimming, bodies of water filled and refilled exclusively with such effluent, and bodies of water allowed under an interim water use permit pursuant to the Lakes Bill if the body of water will be filled and refilled exclusively with such effluent after the permit expires. If 100 percent wastewater is used to water the landscape, the requirements do not apply. For example, if there were sufficient cooling tower blowdown water and greywater available from the operations of a hotel, this wastewater could be used to water any amount of water-intensive landscaped area up to 10 acres. Once a water-intensive landscaped area exceeds 10 acres in size it is defined as a turf-related facility and is subject to regulation under that program.

6.10.5 Industrial Conservation Requirements and Monitoring and Reporting Requirements for New Large Landscape Users

6-1001. *Definitions*

In addition to the definitions set forth in Chapters 1 and 2 of Title 45 of the Arizona Revised Statutes and section 6-201 of this chapter, unless the context otherwise requires, the following words and phrases used in sections 6-1002 and 6-1003 of this chapter shall have the following meanings:

1. *“Direct use effluent” means effluent transported directly from a facility regulated pursuant to Title 49, Chapter 2, Arizona Revised Statutes, to an end user. Direct use effluent does not include effluent that has been stored pursuant to Title 45, Chapter 3.1, Arizona Revised Statutes.*
2. *“Effluent recovered within the area of impact” means effluent that has been stored pursuant to Title 45, Chapter 3.1, Arizona Revised Statutes, and recovered within the stored effluent’s area of impact. For purposes of this definition, “area of impact” has the same meaning as prescribed by A.R.S. § 45-802.01.*
3. *“Landscapable area” means the entire area of a lot less any areas covered by structures, parking lots, roads, or any other area not physically capable of being landscaped.*
4. *“New large landscape user” means a non-residential facility that has a water-intensive landscaped area in excess of 10,000 square feet and that has landscaping planted and maintained after January 1, 1990 or bodies of water, other than bodies of water used primarily for swimming purposes, filled and maintained after January 1, 1990, or both. Turf-related facilities as defined in section 6-301 of this chapter are excluded from this definition.*
5. *“Water-intensive landscaped area” means, for the calendar year in question, all of the following areas within a non-residential facility:*
 - A. *Any area of land that is planted primarily with plants not listed in Appendix 5I, Drought Tolerant/Low Water Use Plant List, or any modifications to the list, and watered within a permanent water application system, except any area of land that is watered exclusively with direct use effluent or effluent recovered within the area of impact.*
 - B. *The total water surface area of all bodies of water within the facility, except bodies of water used primarily for swimming purposes, bodies of water filled and refilled exclusively with direct use effluent or effluent recovered within the area of impact, and bodies of water allowed under an interim water use permit pursuant to A.R.S. § 45-133 if the bodies of water will be filled and refilled exclusively with direct use effluent or effluent recovered within the area of impact after the permit expires.*

6-1002. *Conservation Requirements*

A. *Conservation Requirements for New Large Landscape Users that are not Hotels or Motels*

Beginning on January 1, 2002 and continuing thereafter until the first compliance date for any substitute conservation requirement in The Fourth Management Plan, the water-

intensive landscaped area within a new large landscape user that is not a hotel or motel shall not exceed the greater of the following: (1) an area calculated by adding 10,000 square feet plus 20 percent of the facility's landscapable area in excess of 10,000 square feet; and (2) the total water surface area of all bodies of water within the facility that are allowed under A.R.S. § 45-131 et seq., and that qualify as water-intensive landscaped area.

B. Conservation Requirements for New Large Landscape Users that are Hotels or Motels

Beginning on January 1, 2002 and continuing thereafter until the first compliance date for any substitute conservation requirement in the Fourth Management Plan, the water-intensive landscaped area within a new large landscape user that is a hotel or motel shall not exceed the greater of the following: (1) an area calculated by adding 20,000 square feet plus 20 percent of the facility's landscapable area in excess of 20,000 square feet; and (2) the total water surface area of all bodies of water within the facility that are allowed under A.R.S. § 45-131 et seq., and that qualify as water-intensive landscaped area.

C. Waiver of Conservation Requirements for the Use of 100 Percent Wastewater

The conservation requirements set forth in subsections A and B of this section shall not apply to a new large landscape user in any year in which all of the water used for landscaping purposes within the facility is wastewater.

6-1003. Monitoring and Reporting Requirements

For calendar year 2002 or the calendar year in which the facility first begins to use water, whichever is later, and for each calendar year thereafter until the first compliance date for any substitute monitoring and reporting requirement in the Fourth Management Plan, an industrial user that applies water to a new large landscape user shall include the following information in its annual report required by A.R.S. § 45-632:

- 1. The total quantity of water from any source, including effluent, withdrawn, diverted, or received for use on the facility during the calendar year for landscape watering purposes, including bodies of water filled or refilled during the calendar year, as measured with a measuring device in accordance with the Department's measuring device rules. A.A.C. R12-15-901, et seq.*
- 2. The total amount of landscapable area within the facility.*
- 3. The total amount of water-intensive landscaped area at the facility broken down into the area planted primarily with plants not on the Drought Tolerant/Low Water Use Plant List, or any modifications to the list (except any area watered exclusively with direct use effluent or effluent recovered within the area of impact) and the surface area of all bodies of water (except bodies of water used primarily for swimming purposes, bodies of water filled and refilled exclusively with direct use effluent or effluent recovered within the area of impact, and bodies of water allowed under an interim water use permit if the bodies of water will be exclusively with direct use effluent or effluent recovered within the area of impact after the permit expires).*